

board that is provided with an IF communication system operatively associated with at least one dedicated microprocessor for controlling a set-top box converter allowing access to the Internet by means of the TV cable system.

It is yet another objective of the present invention to provide such a retrofitting, portable, folding, self-contained keyboard that is provided with two, independent, dedicated microprocessors, whereby the keyboard itself serves as a self-contained notebook, or portable, computer by means of the first microprocessor, and also serves as a dedicated Internet-access device by means of the second microprocessor, the second microprocessor controlling a set-top box converter allowing access to the Internet by means of the TV cable system.

In all of the embodiments of the invention, the folding, portable, notebook-computer keyboard of the invention consists of two, pivotally-hinged halves. The two halves are hinged so that may be assume a perfectly flat, horizontal position, or, alternatively, a laterally raised and sloping configuration that provides an enhanced, ergonomic configuration to the user. Each half has its own set of keys and space bar, whereby the two sets of keys together comprise at least all of the keys of a standard keyboard; preferably, the keyboard has additional keys for dedicated use, such as for playing video games. The keyboard of the invention has its own pointing device that takes over the pointing function of the pointing device of the dedicated keyboard provided with the notebook computer, when the keyboard of the invention is used as an auxiliary, retrofitting keyboard for providing a notebook computer with a full-size keyboard. The portable, folding keyboard of the invention also has a gamepad for use in playing video games, which gamepad may be coupled to a standard notebook or PC computer for use in playing the video games on those computers, or, alternatively, when the keypad of the invention has its own dedicated microprocessor, the gamepad is operatively associated therewith. Associated with the gamepad is a joystick-adaptor by which a conventional joystick may be operatively coupled to the notebook computer via the gamepad by which video games may be played. Four, bottom, pivotal feet support the keyboard on and/or above the existing keyboard provided with the notebook computer. The forward portion of each half of the folding, portable, notebook-computer keyboard of the invention has a storage compartment, in which items may be stored. Flip-up wrist rests are also provided at the site of the storage compartments. A carrying case is provided in which the folded-up keyboard may be stored and transported.

The keypad of the invention, in addition to serving as an auxiliary keypad to an existing, conventional notebook computer, or the like, is, one embodiment, also a self-contained unit that is a notebook, or portable, computer in its own right. Thus, the keypad has at least one microprocessor to which inputs from the keys of the keypad are achieved. A detachably-mounted screen or monitor is provided, which, when mounted, is pivotally connected to the housing of the keypad. Preferably, the screen is comprised of a plurality of sections pivoted to each other, to allow for collapsing the screen into a small volume flat on itself and flat against the keyboard.

In another embodiment, the keypad of the invention is provided with another microprocessor. In this embodiment, the first microprocessor performs all of the operations required for a notebook computer, while the second microprocessor is dedicated to the playing of video games, such as "NINTENDO", etc. In this embodiment, the second, video-game microprocessor is associated with one half of

the keypad, and access a CD-player storing the games. In this embodiment, the use of a split-screen monitor will allow two players to play with each screen-section displaying a player's game.

In any of the embodiments, the keypad also has RF receivers sensors and transmitters for controlling a set-top control box for accessing the Internet via the cable TV system.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be more readily understood with reference to the accompanying drawing, wherein:

FIG. 1 is a plan view of the foldable, portable keypad having standard, enlarged-sized keys that is used for retrofitting to a portable, notebook or laptop computer;

FIG. 2 is an elevational, cross-sectional view of the joystick attachment;

FIG. 3 is a plan view of the game-pad and arrow key of the keypad with which the joystick attachment is used;

FIG. 4 is an elevational, cross-sectional view of the joystick attachment in use with the game-pad and arrow key of the keypad;

FIG. 5 is a rear view of the keypad of FIG. 1;

FIG. 6 a front view thereof;

FIG. 7 is a left side view thereof;

FIG. 8 is a right side view thereof;

FIG. 9 is a detail view, in cross section, showing one of the two-piece adjustable legs of the keypad of the invention;

FIG. 10 is a side view showing the folding up of the keypad;

FIG. 11 is a plan view showing a set-top box converter that may be coupled to the keypad of the invention via an interface cord;

FIG. 12 is a plan view of a second embodiment of the invention with the foldable keyboard of FIG. 1 being provided with a split screen, one screen pivotally mounted to one half of the keyboard;

FIG. 13 is a front view thereof, showing the battery compartment and infrared or IF sensor;

FIG. 14 is a rear view thereof;

FIG. 15 is a left side view thereof;

FIG. 16 right side view thereto;

FIG. 17 is a detail view, in cross section, showing one of the two-piece adjustable legs of the keypad of the invention;

FIG. 18 is a detail view of the swivel mount thereof for mounting a monitor;

FIG. 19 is a perspective view of a third embodiment of the invention showing a tri-sectioned split screen having its own microprocessor for one or more of the three sections of the split screen, in combination with a fax/scanner/printer device;

FIG. 20 is a top view thereof;

FIG. 21 is a rear view thereof;

FIG. 22 is a right side view thereof;

FIG. 23 is a left side view thereof;

FIG. 24 is a detail view of the various input ports thereof; and

FIG. 25 is a perspective view of the RF stylus pen thereof.

#### DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings in greater detail, and to FIGS. 1 through 11, the foldable, portable retrofitting com-